ABSTRACT

A press-forming device includes: material characteristic input means inputting at least one of the material characteristics out of sheet thickness, yield strength, 0.2% proof stress, tensile strength, elongation, n value, r value, stress-strain relation equation, hardness, temperature, surface roughness, friction coefficient, or lubricant film thickness, of the material; state variable detector measuring at least one state variable out of punch reaction, metal mold temperature, metal mold distortion amount, work piece deformation amount, and work piece temperature during forming; processing condition computing means computing at least one processing condition out of forming speed, blank holding force, or metal mold temperature from the material characteristic inputted by the material characteristic inputting means and the state variable during forming measured by the state variable detector; and processing condition controller controlling at least one of the punch or die movement speed, temperature, or blank holding force according to the processing condition computed by the processing condition computing means.